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# **MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE**

How Biased and Carceral Responses to Persons With Mental Illness in Acute Medical Care Settings Constitute latrogenic Harms

Carmen Black, MD and Amanda Calhoun, MD, MPH

#### Abstract

Recognizing their roles in iatrogenesis requires clinicians and professions to take responsibility for attitudes and policies that harm patients and waste resources. A striking, neglected set of examples of iatrogenic harm involves persons with severe mental illness (SMI) who seek inpatient medical care. This article describes how medicine, despite spending billions each year trying to respond to acute physical medical needs of persons with SMI, participates in carceral policies and practices that fail to prioritize continuity of care. This article also details clinicians' and professions' responsibilities to mitigate their roles in iatrogenic harm incursion by practicing antiracist, evidence-based, collaborative care to motivate equity, reduce waste, and improve outcomes, especially in crisis responses to patients experiencing acute exacerbations of SMI in inpatient medical care settings.

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# Hidden latrogenesis

The word *iatrogenesis*, translated from the original Greek, means "physician origin" and refers to instances in which health care causes harm to patients.¹ Commonly cited examples of iatrogenic patient harm include drug side effects, surgical complications, and medication or procedural mistakes.¹ Although perhaps not as obvious, problematic clinician attitudes towards marginalized patients,² such as patients of color and persons with severe mental illness (SMI), may also influence clinician behaviors and medical decision making, resulting in well-documented inferior health outcomes for these groups.³,⁴,5,6 Most importantly, for patients, health care racism and bias against mental illness can impede access to and quality of care.⁴,5,6 Furthermore, disparate outcomes created by biased clinician attitudes and health care system policies iatrogenically increase financial burden on health care systems in correcting these harms, as iatrogenic harms have been shown to have negative financial and clinical outcomes.¹ This ineffectual utilization of limited health care resources in turn risks secondary patient harms by reducing the number of patients able to be treated.

Beyond hospital systems, iatrogenesis can also manifest as secondary financial and physical hardships for patients. For example, Black patients are inequitably vulnerable to accruing medical debt when seeking health care,<sup>8</sup> and financial barriers lead to worsened recovery, decreased quality of life, and excess rehospitalization among patients with cardiac disease.<sup>9</sup> Thus, identifying ways that clinician racism and stigmatization of patients influence biased attitudes and practices, leading to patient physical and financial distress as well as wasted hospital expenditures, is critical.

# Responsibility for latrogenesis

Perhaps one of the most striking examples of iatrogenesis is when persons with SMI seek inpatient medical assistance.<sup>3,10,11,12,13</sup> One study showed that persons with SMI experienced 142 physical harms per 100 medical hospitalizations,<sup>3</sup> in contrast to a separate study showing that general hospitalized patients experienced only 49 physical harms per 100 hospitalizations.<sup>14</sup> latrogenic harms undoubtedly contribute to greater nonmental health spending on patients with SMI than other patients. For example, Figueroa et al found that excess spending on nonmental health conditions for Medicare patients with mental health disorders was twice the amount spent treating their mental health conditions.<sup>10</sup> Similar findings have been replicated across the spectrum of the commercially insured to those covered by Medicare and Medicaid.<sup>12,13</sup>

The recognition of iatrogenesis requires medicine to take responsibility for instances in which clinician attitudes and systems policies harm patients and waste limited health care resources. Some researchers promote the integration of primary and mental health care, such as the collaborative care model, as a solution to excessive and ineffective health care spending for the SMI population. <sup>10,12,13</sup> Nonetheless, when theorizing why nonmental health spending was so much higher in a population with mental health disorders, Figueroa et al postulated: "It is likely that mental illness impairs the ability of patients and health systems to take effective care of chronic medical conditions." <sup>10</sup> However, the premise that a mental illness, in its own right, can hinder health systems from delivering cost-effective care <sup>10</sup> treats a clinical diagnosis as a sentient, organic being instead of as an assigned, inanimate nomenclature. This premise also weakens the recognition of iatrogenesis, as the onus of responsibility for substandard outcomes and wasteful care for patients with SMI is diverted from health care's actions and policies and instead projected onto a clinical diagnosis, as if a mental illness is an autonomously functioning entity.

Adhering to evidence-based, collaborative care practices may indeed reduce wasteful spending and improve clinical outcomes. Yet it has been documented that stigma against mental illness<sup>6</sup> and racial prejudice<sup>15</sup> independently limit adherence to best practices in clinical diagnosis and treatment. Therefore, collaborative care alone cannot improve clinical outcomes and reduce hospital waste in the care of persons living with SMI. Evidence-based practices combating racism and anti-mental health bias are equally needed.

## **Deviation From Evidence-Based Practice as Harm**

Choosing care coordination as a starting point to address mental health disparities on inpatient medical units assumes that evidence-based practices are readily available or already in practice for populations without SMI. However, for patients with SMI, there are

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perceived barriers to care integration and access. Clinical symptoms like depressed mood or disorganized thinking may indeed make it more difficult for patients with behavioral health conditions to arrange, remember, and get transportation to outpatient medical appointments. These difficulties put patients with SMI at increased risk of having more poorly managed chronic medical conditions that require more costly hospitalizations.

There is one important distinction to be made about coordinating care in inpatient vs outpatient treatment settings: clinicians and systems face fewer barriers to coordinating care and making it accessible in inpatient than outpatient settings because patients with SMI are already physically present and receiving care in the exact same settings as patients without SMI. That is, patients with and without SMI on the same inpatient medical unit are receiving care in the same location with the same available resources and same ability to coordinate inpatient services like testing, consultations, procedures, and medications. However, despite well-known inequitable medical treatment outcomes for persons with mental illness, data suggest that patients with mental illness have significantly higher health care spending than those without mental illness. 12,13 Spending on medical and surgical care, including inpatient medical care, is higher for those with than without mental illness even after controlling for the number of chronic medical conditions. 12 A closer examination of how clinician-level behaviors and systems-level policies deviate from evidence-based practices when treating persons with SMI is merited.

Bias against persons living with SMI fosters prejudiced clinician-patient interactions and skews medical decision making.<sup>5,6</sup> Examples of clinician-level deficits found to contribute to inpatient adverse safety events for those with SMI include inadequate patient monitoring, delayed or incomplete care, lack of trainee supervision, prescribing errors, and dispensing errors.<sup>3,16</sup> These clinician-induced adverse outcomes occurring during inpatient hospitalizations require additional resources to correct.

Expenses stemming from ineffective care owing to clinician bias could be reflected in avoidable lengthened hospital stays, emergency department visits, and rehospitalizations. Lending support to this perspective, a 2020 study noted that the largest spending increases for Medicare recipients with SMI was due to more frequent hospitalizations in general acute care hospitals and a greater number of days in hospital, among other factors. A 2014 study of Medicaid recipients with behavioral health disorders reported similar findings. Patients with behavioral health diagnoses had 30-day readmission rates up to 10 times higher and potentially avoidable hospitalizations up to 14 times higher than those without a behavioral health diagnosis, even after controlling for physical health status.

Although hospitals see increased inpatient resource utilization for patients with SMI, those with SMI contrastingly suffer more patient harms and inferior clinical outcomes than those without SMI.<sup>3,16</sup> In these instances of inpatient care, however, it is not mental illness, limited access, or poor coordination that disadvantages patient care. Rather, we argue that iatrogenic harm and waste is generated by clinicians' bias expressions; better care coordination alone would not eliminate this source of harm to patients.

#### Carceral Response as Harm

Personal biases converge at the systems level to create an entire series of discriminatory policies and protocols that fail to ensure equitable, evidence-based care

to persons with SMI on inpatient medical units. Current management of behavioral emergencies in hospital medicine is perhaps the most profound example of systems-level deviation from evidence-based care for the SMI population, especially for people of color. Behavioral emergencies are incidents of extreme agitation that patients may experience while medically hospitalized. They can be categorized into 3 subtypes: clinical psychiatric emergencies, iatrogenic insults, and coping/stress patient reactions.<sup>17</sup>

Most US hospitals do not distinguish emergency protocols for behavioral/psychiatric crises and unarmed security threats, thereby substituting police and security enforcement for clinical or patient-centered treatment in the event of a behavioral emergency. Personal emergency. Security-only protocols are inadequate when behavioral dysregulation is a byproduct of acute disease exacerbations from overlooked or delayed treatment, sermed clinical psychiatric emergencies, because security personnel are not trained medical practitioners. Security-only protocols also foster excessive use of sedation and physical restraints, which carries its own sequela of injuries (eg, respiratory complications and skin breakdown). The expenses necessary to correct each avoidable harm would be reflected in heightened cost estimates for treatment of persons with SMI on inpatient medical units. No study that we know of has investigated or supported the superiority of nonclinical security enforcement responses for clinical or patient-centered crises; therefore, the prevalence of security-only responses for behavioral emergencies is driven by entire systems operating without an evidence-based rationale.

Reliance on security-only protocols is problematic in other ways. Patients with mental illness are well known to endure victimization by law enforcement. For example, a 2021 study found that patients with SMI are 11.6 times more likely to experience use of force and 10.7 times more likely to be physically injured during police encounters than those without SMI.<sup>20</sup> Additionally, persons with SMI are likely to be treated in community mental health centers, which also suffer from increased health care setting-based policing due to racism and bias against persons with SMI.<sup>21</sup> Security-only interventions in behavioral emergencies invite those same prejudices into inpatient care, and harms of biased hospital policing are compounded by racism and bias against mental health. Health care professionals' own prejudice can lead them to disproportionately activate security emergency protocols on patients of color and patients living with SMI, as happened at Seattle Children's Hospital, where security has been called on Black patients at twice the rate of White patients for over 10 years without anything being done about it.<sup>22</sup> Racism and bias in security management of behavioral emergencies risks psychological harm through retraumatization, thereby violating the ethical principle of nonmaleficence.<sup>17</sup> Behavioral distress precipitated by prejudiced clinician attitudes would fall under the behavioral emergency subcategory of "iatrogenic insults." 17

Evidence-based, patient-centered solutions exist, including behavioral/psychiatric equivalents of medical emergency response teams, often called behavioral emergency response teams (BERTs).<sup>17,18,19</sup> A fully detailed, mechanistic safety analysis of security-only vs BERT models of behavioral emergency response protocols has been published,<sup>19</sup> but, generally speaking, BERTs offer an advantage over security-only protocols by providing interdisciplinary teams lead by medical professionals capable of prioritizing patient de-escalation and clinical intervention. The professional composition of BERTS varies according to locally available resources but may include nurses, psychiatrists, and other physicians from primary inpatient medical/surgical teams. Security personnel are

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often important team members within most BERT models for instances when patient agitation exceeds clinical capacity. However, they are under the explicit direction of clinician leadership and are not to interact with patients unless specifically requested to do so. Therefore, security personnel are often present in fewer numbers during behavioral than primary security interventions and often not seen by patients at all. Data suggest that clinicians operating within a patient-centered BERT model learn to deescalate patient distress more often on their own, without requiring a BERT (or security) call at all. 19,23 Although such evidence-based, cost-effective behavioral emergency interventions significantly improve both patient and clinician safety, 19,22 most hospitals continue to follow a policing model of behavioral emergencies. Therefore, a focus on coordinating care assumes that excessive spending can be reduced by better integrating preexisting evidence-based practices within systems that currently operate without evidence-based practices for costly and potentially fatal behavioral emergencies.

## "Limited" Psychiatric Resources

Clinical budgets for behavioral health compete with budgets for policing practices in systems with finite financial resources. Given the tremendous and ineffectual expenditures lost to biased and non-evidence-based practices, many hospital systems feel that they lack the "available psychiatric resources" to fund collaborative care practices and BERTs. 17,18,19 Systems that utilize a policing approach to behavioral emergencies invest heavily in police-centric expenses instead of clinically relevant and patient-centered solutions like BERTs. 17,19 For example, a hospital system using a policing model to respond to behavioral emergencies must fund sufficient police or security personnel to attend sometimes lengthy behavioral emergencies while still maintaining adequate coverage of vital security functions elsewhere in the system. The salary, benefits, recruitment, and staffing of a police or security force large enough for this coverage draws from the limited pool of funding that could otherwise be reallocated toward coordinated care practices, training in antiracism and antibias, and depoliced behavioral emergencies. Instead, despite extraordinary physical health care expenditures for persons with SMI,10,11,12,13 primary security expenses and adverse events resulting from biased behaviors are often not recognized as iatrogenic harms and waste.19

#### Conclusion

Billions of health care dollars are spent each year attempting to treat the acute medical needs of persons with mental illness. Unfortunately, health care currently prioritizes disjointed, police-laden, and racially biased policies, which, alongside prejudiced clinician attitudes, fail to offer healing to individuals living with severe mental illness, especially those of color. A path towards solutions exists. However, inpatient medicine's progress toward more equitable, antiracist, evidence-based, and cost-effective practices first requires us to boldly denounce hospital harms and waste born of our own problematic biases and attitudes.

# References

- 1. Peer RF, Shabir N. latrogenesis: a review on nature, extent, and distribution of healthcare hazards. *J Family Med Prim Care*. 2018;7(2):309-314.
- 2. FitzGerald C, Hurst S. Implicit bias in healthcare professionals: a systematic review. *BMC Med Ethics*. 2017;18:19.
- 3. Daumit GL, McGinty EE, Pronovost P, et al. Patient safety events and harms during medical and surgical hospitalizations for persons with serious mental illness. *Psychiatr Serv.* 2016;67(10):1068-1075.

- 4. Williams DR, Rucker TD. Understanding and addressing racial disparities in health care. *Health Care Financ Rev.* 2000;21(4):75-90.
- 5. Merino Y, Adams L, Hall WJ. Implicit bias and mental health professionals: priorities and directions for research. *Psychiatr Serv.* 2018;69(6):723-725.
- 6. Knaak S, Mantler E, Szeto A. Mental illness-related stigma in healthcare: barriers to access and care and evidence-based solutions. *Healthc Manage Forum*. 2017;30(2):111-116.
- 7. Adler L, Yi D, Li M, et al. Impact of inpatient harms on hospital finances and patient clinical outcomes. *J Patient Saf.* 2018;14(2):67-73.
- 8. Wiltshire JC, Elder K, Kiefe C, Allison JJ. Medical debt and related financial consequences among older African American and White adults. *Am J Public Health*. 2016;106(6):1086-1091.
- 9. Rahimi AR, Spertus JA, Reid KJ, Bernheim SM, Krumholz HM. Financial barriers to health care and outcomes after acute myocardial infarction. *JAMA*. 2007;297(10):1063-1072.
- 10. Figueroa JF, Phelan J, Orav EJ, Patel V, Jha AK. Association of mental health disorders with health care spending in the Medicare population. *JAMA Netw Open*. 2020;3(3):e201210.
- 11. Sporinova B, Manns B, Tonelli M, et al. Association of mental health disorders with health care utilization and costs among adults with chronic disease. *JAMA Netw Open.* 2019;2(8):e199910.
- 12. Freeman E, McGuire CA, Thomas JW, Thayer DA. Factors affecting costs in Medicaid populations with behavioral health disorders. *Med Care*. 2014;52(suppl 3):S60-S66.
- 13. Melek SP, Norris DT, Paulus J, Matthews K, Weaver A, Davenport S. Potential economic impact of integrated medical-behavioral healthcare: updated projections for 2017. Milliman; 2018. Accessed September 7, 2021. https://www.milliman.com/-/media/milliman/importedfiles/uploadedfiles/insight/2018/potential-economic-impact-integrated-healthcare.ashx
- 14. Classen DC, Resar R, Griffin F, et al. "Global Trigger Tool" shows that adverse events in hospitals may be ten times greater than previously measured. *Health Aff (Millwood)*. 2011;30(4):581-589.
- 15. Black Parker C, McCall WV, Spearman-McCarthy EV, Rosenquist P, Cortese N. Clinicians' racial bias contributing to disparities in electroconvulsive therapy for patients from racial-ethnic minority groups. *Psychiatr Serv.* 2021;72(6):684-690.
- 16. McGinty EE, Thompson DA, Pronovost PJ, et al. Patient, provider, and system factors contributing to patient safety events during medical and surgical hospitalizations for persons with serious mental illness. *J Nerv Ment Dis*. 2017;205(6):495-501.
- 17. Parker CB, Calhoun A, Wong AH, Davidson L, Dike C. A call for behavioral emergency response teams in inpatient hospital settings. *AMA J Ethics*. 2020;22(11):E956-E964.
- 18. Parker CB, Cortese N. What's in a name? Surrogate security codes encourage open bias against mental health emergencies. *J Am Assoc Emerg Psychiatry*. 2019;7-12.
- 19. Parker CB. Psychiatric emergencies in nonpsychiatric settings: perception precludes preparedness. *Psychosomatics*. 2019;60(4):352-360.
- 20. Laniyonu A, Goff PA. Measuring disparities in police use of force and injury among persons with serious mental illness. *BMC Psychiatry*. 2021;21:500.

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- 21. Black C, Lo E, Gallagher K. Community mental health centers' roles in depolicing medicine. *AMA J Ethics*. 2022;24(3):E218-E225.
- 22. Fields A. Seattle Children's knew for years security was called disproportionately on Black patients. Seattle Times. April 21, 2021. Accessed September 28, 2021. https://www.seattletimes.com/seattle-news/times-watchdog/seattle-childrens-knew-for-years-security-called-more-often-on-black-patients/
- 23. Choi KR, Omery AK, Watkins AM. An integrative literature review of psychiatric rapid response teams and their implementation for de-escalating behavioral crises in nonpsychiatric hospital settings. *J Nurs Adm.* 2019;49(6):297-302.

Carmen Black, MD is an assistant professor of psychiatry at the Yale University School of Medicine in New Haven, Connecticut, with a primary clinical appointment at the Connecticut Mental Health Center. Dr Black is a proud African American physician with demonstrated research and advocacy interests in addressing unconscious bias within daily practice and education settings. She is also a strong supporter of the equitable treatment of behavioral emergencies within general hospital medicine.

Amanda Calhoun, MD, MPH is an Albert J. Solnit Integrated Adult/Child Psychiatry Clinical Fellow at the Yale University School of Medicine in New Haven, Connecticut. Her research interests include patient-centered approaches to emergent behavioral care for children with autism spectrum disorder and improving health outcomes in African/African diaspora and Indigenous children.

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## Conflict of Interest Disclosure

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